Labor Market Incorporation of Immigrants in Japan and the United States: A Comparative Analysis

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ABSTRACT

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The most commonly used model of labor market incorporation among immigrants in the United States analyzes their earnings largely as a function of human capital variables such as education, language competence, age, length of residence and employment experience in the receiving country. However, such a simple model is not necessarily cross-culturally applicable and may lose much of its explanatory power in other societies, where immigrants encounter different labor market conditions. This paper estimates multivariate models of wage determination among samples of foreign workers interviewed in 1996 in San Diego County, California, and the Japanese industrial city of Hamamatsu. In contrast to San Diego, the standard measures of achieved human capital do not significantly influence immigrant wages in Hamamatsu. Instead, ascribed human capital (e.g., gender, ethnicity) has a much greater impact on immigrant wages in Japan than in the United States. Although the use of social networks by immigrants to find jobs has a significant impact on wages in both countries, the effect is positive in Hamamatsu, whereas it is negative in San Diego. The paper draws on data from ethnographic studies in Japan and California to suggest explanations for these divergent results. More generally, the paper illustrates the importance of reception contexts (host societies) in determining labor market outcomes for immigrant workers.

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Introduction: Human Capital and Immigrant Labor Market Incorporation

The most commonly used model of labor market incorporation among immigrants in the United States analyzes their earnings largely as a function of standard human capital variables, such as education, language competence, age, and employment experience in the host society. Particular emphasis has been placed especially on the number of years of education upon arrival in the U.S. as a determinant of immigrant wages (see, for example, Borjas 1995), sometimes with a bow toward aggregate labor supply and public policy variables (Bansak and Raphael 1998; Dávila and Pagán 1998; Phillips and Massey 2000). However, such a simple model is not necessarily cross-culturally applicable and may lose much of its explanatory power in other societies, where immigrants encounter different labor market conditions.

Drawing on data gathered for a comparative study of the role of immigrant labor in the United States and Japanese economies (Cornelius and Kuwahara, 1998), this paper estimates multivariate models of wage determination among 837 foreign workers interviewed in 1996 in San Diego County, California, and the Japanese industrial city of Hamamatsu. In addition to the usual human capital variables, our models incorporate a number of variables that cannot be measured using census data (e.g., decennial census data and the U.S. Current Population Survey), such as legal status, mode of job-seeking, and characteristics of the firm in which the immigrant is employed. The result is a much fuller picture of the labor market incorporation process among foreign workers in the United States and Japan, which also reveals important variations in the explanatory power of certain individual characteristics from one national context to the other. In contrast to San Diego, the standard measures of human capital do not significantly influence immigrant wages in Hamamatsu, Japan, because of the differences in the

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labor market and in the recruitment and utilization of immigrant workers, as well as the much
greater value placed on the worker’s ethnicity among Japanese employers. Instead of *achieved*
human capital variables (such as education, language ability, number of years in host country),
*ascribed* human capital (gender, ethnicity)\(^2\) has a much greater impact on immigrant wages in
Japan than in the United States. Although the use of social networks by immigrants to find jobs
has a significant impact on wages in both countries, the effect is positive in Hamamatsu, whereas
it is negative in San Diego.

The dependent variable in both models is the natural log of hourly earnings, which
enables us to interpret the estimated coefficients as the impact that the independent variable has
on earnings as a percentage. Tables 1 and 3 present the means and standard deviations of the
variables used in each model, in addition to the expected signs of the estimated coefficients. The
model for foreign workers in San Diego incorporates some data that are not available for our
Hamamatsu sample. Specifically, it is not possible in the case of Hamamatsu workers to match
characteristics of the firm in which they are employed with the workers, except for the broad
sector of the economy to which the firm belongs (manufacturing, construction, or services). The
sampling procedure used for the San Diego portion of the study\(^3\) generated detailed data on the
firm in which the immigrant was working, including the percentage of foreign-born persons in

\(^2\) Ascribed and achieved status is a classical distinction in the sociology literature (see e.g., Giddens 1989, McCall
and Simmons 1978:168-169). Ascribed status simply refers to a social status that has been inherited or assigned by
birth and cannot be changed or modified (e.g., sex, race, ethnicity, and kinship status). In contrast, achieved statuses
are actively acquired by the individual by personal effort, ability, experience, and social recognition and include
occupational and educational status, social group membership, and professional rank. Of course, the distinction is
not always clear-cut, since an ascribed status such as ethnicity can be manipulated, disguised, or even changed, and
can therefore sometimes be "achieved." Even sex and race can now be modified. The ascribed or achieved nature
of certain social statuses, such as nationality, are ambiguous, since they can both be ascribed (by descent or place of
birth) or achieved/acquired (by naturalization).

\(^3\) For details concerning the sample design and interviewing procedures for both research sites, see Cornelius and
the production work force, the annual turnover rate among production workers, and whether native-born U.S. workers are part of the firm’s applicant pool for entry-level production jobs.

The better performance of the San Diego wage determination model (which explains 50 percent of the observed variation in wages) as compared with the Hamamatsu model (which explains 33 percent of the variance) can be attributed largely to the availability of additional information on the San Diego workers, which enabled us to include more of the theoretically relevant explanatory variables.

The San Diego model includes nine industrial-sector dummy variables, representing the nine sectors of the San Diego economy in which immigrant workers and their employers were sampled. The reference sector is the restaurant sector, in which average wages for entry-level workers were reported (by both employers and workers) to be the lowest. Therefore, the signs of the estimated coefficients for employment in the other eight sectors represented in the model are anticipated to be positive. In the Hamamatsu model the reference industry sector is the relatively high-paying service sector. Hence the expected signs for employment in the manufacturing and construction sectors are negative.

Results

The results from our regression model analyzing immigrants’ earnings in Hamamatsu, Japan (Table 4) indicate that none of the standard human capital variables (what we call achieved human capital) that might be expected to increase wages proved to be statistically significant at the $p<.05$ or $p<.10$ level. These include age, educational level, Japanese language ability, time living in Japan (only one of the three forms of this variable--months cubed--is statistically significant, and barely so), and job seniority (years with the current employer). In short, the
achieved human capital that foreign workers bring with them to Japan (or acquire after arrival, e.g., Japanese language competence) has very little impact on the wages they earn.

In contrast to achieved human capital, ascribed human capital variables (sex and ethnicity) are much more important as predictors of immigrant in Hamamatsu. The ascribed attributes of sex (female) and ethnicity (being nikkeijin, i.e., Japanese descendants from South American countries admitted to Japan under special visa categories)\(^4\) both have a very significant influence on wages. As expected, given the traditionally high degree of wage discrimination against women in Japan, female status is strongly and negatively related to wage levels (30 percent lower compared to 4.5 percent lower in San Diego). On the other hand, nikkeijin ethnic status is strongly and positively related to wages (25 percent higher).

The results from our model of wage determination for foreign workers in San Diego (Table 4) are quite different. Consistent with the standard wage determination model, all of the standard achieved human capital variables are statistically significant and have a positive impact on wage levels. These include English language fluency, job seniority (years with currently employers), years of schooling, and time spent in the United States. In contrast to the Hamamatsu case, the ascribed attributes of sex and ethnicity have significantly less effect on the wages of immigrants. Female immigrants earn 4.5 percent less than men, but the result is not statistically significant.

The acquisition of a job through immigrant social networks is strongly related to wages for both the Hamamatsu and San Diego samples, but in the opposite direction. In Hamamatsu, if an immigrant was hired through relatives or friends, the person’s wages were 20 percent higher

\(^4\) Brazilians of Japanese ancestry (nikkeijin) comprised 61 percent of the registered foreign-born population in Hamamatsu at the time of our fieldwork in the city. Nationwide, Japanese-Brazilians constituted 15.7 percent of the total of registered foreign nationals in 1997 (calculated from Iguchi 1998). On the evolution of the return migratory flow of Brazilian Nikkeijin to Japan, see Tsuda (1999a).
than if they were not recruited through a social network. Likewise, job recruitment through professional labor brokers has a statistically significant and substantially positive effect on wages. In contrast, when foreign workers find jobs through social networks in San Diego, wages are lower by 20 percent.

However, there are also some similarities in the results from the two countries. Legal status (entered illegally) is not a significant predictor of wages, either in Hamamatsu or San Diego. As expected, the higher the percentage of foreigners in the work force at the immigrant’s place of employment, the lower the hourly wages received. This is consistent with our finding that the most immigrant-dependent firms in San Diego pay lower wages, averaging $5.04 per hour (in 1996) for entry-level production workers, as compared with $6.02 per hour in less immigrant-dependent firms (Cornelius and Kuwahara 1998: 20). We found this wage differential to be much less pronounced in Hamamatsu, where highly immigrant-dependent firms were paying only $0.12 per hour less for entry-level production work than less immigrant-dependent firms (not a statistically significant difference). Also, the model for San Diego shows that if some native-born U.S. workers apply for the same kinds of jobs done by immigrants in a given firm, the immigrant employees of the firm are likely to be earning 10 percent more than his counterparts in businesses where native workers are absent from the job applicant pool. This is a clear indication of upward pressure on wage scales, in firms that are not completely dependent on immigrants as production workers. Finally, all of the dummy variables in the San Diego model for sector of employment are statistically significant predictors of wages. For example, immigrants employed as construction workers earn 49 percent more than those working in

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5 For this comparison, highly immigrant-dependent firms were defined as those that scored above the mean for our sample of firms in terms of the percentage of foreign-born persons in the production work force; those that scored below the mean were classified as less immigrant-dependent firms.
restaurants. Likewise in Hamamatsu, the negative coefficients for being employed in construction or manufacturing mean that workers in those sectors are earning less than those employed in services (e.g., manufacturing workers earn 27 percent less per hour; construction workers earn 26 percent less, but that result is not statistically significant).

Achieved Human Capital and Wages

One of the most striking differences in the wage determination estimates for Hamamatsu and San Diego concerns the explanatory power of standard achieved human capital variables such as educational background, language competence, length of stay, and employment experience in the host country. In contrast to their importance in San Diego, the absence of any statistically significant relationship between these variables and wages among foreign workers in Hamamatsu is quite striking. What are the differences in the labor markets of the two countries that produce this wide divergence in results? Why does the standard wage determination model for immigrant wages, which works so well in the U.S. context, not apply to Japan, as illustrated by the Hamamatsu case?

Although Japan was, for a number of decades, the only advanced industrialized country that did not rely on a significant number of immigrant workers, it has now succumbed to the increasing global movement of populations. Because of the acute labor shortage that developed in the late 1980s and growing economic disparities vis-à-vis Third World countries, Japan currently has well over 800,000 foreign-born laborers. Foreign workers are concentrated in the industrial manufacturing and construction sectors, but increasingly they are found in food processing and service industries as well. They perform “3K” jobs (the Japanese acronym for dirty, dangerous and difficult), mostly in small and medium-sized businesses. Japan has an ethnically diverse immigrant population, with significant numbers drawn from various countries
in Latin America, East and Southeast Asia, and the Middle East. The foreign-born population includes over 275,000 immigrant workers from the South American countries of Brazil, Peru, Argentina, Bolivia, and Paraguay who are predominantly Japanese descent *nikkeijin*. In addition, about 40,000 foreign "trainees" have been admitted annually since 1990, most of whom are not receiving any technical training but are working simply as unskilled laborers in Japanese factories (Oishi 1995). There is also a substantial population of illegal foreigners, estimated by the government at 252,000 in March 2001. Most immigrants working illegally in Japan entered legally, on short-term tourist visas.

*When Education and Language Do Not Matter*

The reasons why the achieved human capital possessed by immigrant workers in Hamamatsu had no significant effect on their wages were quite evident from ethnographic interviews with employers and Brazilian *nikkeijin* workers (Tsuda, forthcoming-b). For instance, in contrast to employers in San Diego, Japanese companies and the labor brokers who hire and supply Japanese companies with foreign workers attach almost no importance to the immigrant's educational background (years of schooling). As a result, higher educational level does not correspond with higher wages, as would normally be expected. When hiring Brazilian *nikkeijin* workers, the most important criteria used by all employers to screen applicants were visa status (whether the person has a valid visa that permits employment), Japanese language ability, and ethnicity (whether the applicant is of pure Japanese descent [*nikkeijin*], of mixed heritage, or non-*nikkeijin*). Other factors considered included age, personality, and attitude (whether the person seems diligent), and past employment history (some employers avoid workers who have

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6 The impact of ethnic status on employment will be discussed further in the next section.
switched jobs too often in the past). Almost none of the employers seriously considered the applicant's educational background in the home country, although the *nikkeijin* were often well-educated, white-collar workers in Brazil. Most either did not inquire about past education or asked the question as a matter of procedure but did not consider it important. The reason is that the vast majority of the Brazilian *nikkeijin* are hired for unskilled, manual jobs for which previous education has no impact on performance (Sellek 2001: 100-101). Most of the jobs require only simple and repetitive physical tasks that anyone can learn, either immediately or with a short period of training, regardless of the worker's level of formal education (Cornelius and Kuwahara 1998). A labor broker explained as follows:

> As a procedural step, we generally ask about the person's educational background and the type of work he did back in Brazil, but we don't care about such issues. We are looking for simple manual laborers, and for such work, previous occupational and educational differences simply don't matter. Anyone can do this kind of work and ability differences don't show up between people of different social backgrounds.

Some Japanese employers even claim that the better-educated *nikkeijin* perform less well as unskilled workers because they have been spoiled by white-collar working conditions and air-conditioned offices and are less prepared to cope with the physical demands and fast pace of factory work. Such a view was expressed by a labor broker who specializes in hiring Brazilian *nikkeijin*:

> Lots of the *nikkeijin* are well educated and some are quite intelligent, but they can't do the work as well as a typical unskilled Japanese worker with only a high school education because they have no experience with manual labor. They may have

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7 These employers feel that *nikkeijin* workers who have a history of changing jobs are likely to quickly leave even if hired.

8 The *nikkeijin* who have the most difficulty with factory work in Japan are those who were housewives and never worked outside the home in Brazil. Youth without prior job experience are also sometimes viewed by employers as unreliable.
been extremely brilliant in Brazil, but they come to Japan and realize they can't
compete with uneducated Japanese factory workers.

Very few nikkeijin are hired for higher-paid, semi-skilled or technical jobs in which
educational background and learning ability would be relevant. One labor broker explained that
he would usually supply computer manufacturing companies with better educated nikkeijin while
sending nikkeijin with agricultural backgrounds to companies that require hard physical work,
although he felt that what is more important is not previous education but the individual's work
ethic. However, labor brokers who make such distinctions based on the educational background
of their nikkeijin workers are quite rare because most deal with companies that use immigrants
strictly as unskilled laborers. Previous education seems to have an effect on wages only for
those bilingual nikkeijin who are hired as translators and liaisons (either in the factory or in
company offices) and serve as intermediaries between Japanese managers and nikkeijin workers.
College-educated nikkeijin are usually preferred in for these higher level positions, which pay
better wages than job on the factory assembly-line. However, only a very small number of
nikkeijin are hired for such "culturally skilled" jobs. In this manner, because most employment
is for unskilled factory work where previous education is irrelevant, the nikkeijin with more years
of schooling are not rewarded with higher wages.

The same general conditions apply for the employment of non-nikkeijin foreign workers.
Although they are relatively well-educated, they again work predominantly as unskilled
immigrant laborers. Because foreign workers in Japan are predominantly confined to low-level,
unskilled jobs for which a college or advanced degree earned abroad has no impact on work
performance, educational background does not improve their employability or ability to obtain
higher level jobs and wages. This contrasts with immigrant workers in San Diego, who are
employed in a wider range of jobs at various skill levels. Thus, the different structure of the
immigrant labor market in Japan helps to explain why the usual relationship between educational level and wages does not obtain among foreign workers in that country.

Japanese language competence as an achieved human capital variable is considerably more important for immigrant employment than years of education. As noted above, language ability is one of the most important criteria used by employers when hiring foreign workers and those who speak Japanese well are more likely to find jobs. However, as our regression analysis reveals, Japanese language competence generally does not influence wages. In other words, although foreign workers who speak some Japanese have a considerably easier time finding employment, they are not necessarily given higher-paying jobs because they are employed as low-level, unskilled manual laborers. For instance, Japanese employers who use nikkeijin workers generally do not pay Japanese speakers better salaries because they do the same type of unskilled work as nikkeijin who do not speak good Japanese. In some factories, nikkeijin who speak Japanese are given slightly more technical jobs than the purely physical tasks assigned to most others, but these are different from technical and skilled jobs that would pay higher wages. Again, the only observable subgroup who are rewarded by higher salaries for their Japanese proficiency are the very small number of nikkeijin who are promoted to lower-level supervisory jobs on the factory floor or become cultural intermediaries and translators in company or broker offices. The situation is quite different in San Diego, where jobs at more varied skill (and wage) levels are available for immigrants, allowing those who speak English to benefit over their non-English speaking colleagues who cannot be hired for such jobs.

Employment on the Margins and the Marginality of Employment Experience

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9 Those promoted to low-level supervisory positions do not always received better pay.
Education and language ability are not the only achieved human capital attributes that do not produce significant wage differentials among immigrants in Hamamatsu. The data also defy the commonsense expectation that the longer immigrants stay in the host society or with a certain employer, the higher their wages. Time spent in Japan and length of employment at a particular company are not reflected in higher wages, because foreign workers continue to do unskilled manual labor and do not advance to more skilled and higher-paying jobs within the company even over an extended period of time.

In the case of *nikkeijin* workers, their perceived "temporary" status is one of the primary reasons why they remain confined to lower-paid, unskilled jobs regardless of how long they actually reside in Japan. Most *nikkeijin* workers are target-earners, wishing to earn as much money as possible during a short two or three year sojourn. They change companies very frequently as they constantly search for jobs with higher hourly wages, better working conditions, and more overtime opportunities.¹⁰ Their tendency to switch jobs often is reinforced by their employment status as informal, causal workers, who are always dismissed before regular Japanese workers whenever production levels decline at the company.

Because the Japanese-Brazilians are acutely aware that they are marginal workers with no job security who can be dismissed at any time, most of them do not develop any type of loyalty or commitment to their employer and therefore do not hesitate to leave the company for purely economic motives (often without properly informing the management). Some Japanese employers want their *nikkeijin* workers to remain at their firms for longer periods and frequently lament the high turnover rate, which persists despite their efforts to retain the *nikkeijin* through

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¹⁰ It was rare to find *nikkeijin* in Hamamatsu who felt that they would remain at the same firm even if they found a better job, because they wanted to demonstrate their loyalty to the firm and gain the trust of their employer. A few Brazilian *nikkeijin* mentioned that they would not change jobs because of the uncertainty and brief loss of pay (while transferring to the new firm).
incentives such as higher pay, partial bonuses, and improved housing conditions. "The nikkeijin
switch firms if they find a job that pays even one yen more," is a common complaint heard
among Japanese employers (this has become less of a concern now with the prolonged Japanese
recession). Even as the length of their sojourn in Japan increases, few nikkeijin remain at one
company long enough to advance to more skilled, higher status, and better-paid jobs.

The most important reason why neither time spent in Japan nor with a specific employer
raises wages among foreign workers is their status as a marginal and informal labor force. Most
unskilled immigrant workers in Japan are hired strictly as hi-seishain (informal, casual workers)
or kikan-shain (temporary contract laborers) and are not put on the promotion track to receive
gradual salary increases over time like regular Japanese workers (seishain). This is especially
ture for foreign workers who are recruited and employed by labor broker firms.

Japan has always had a system of labor broker firms (called assen gaisha) that have
traditionally supplied companies with an informal work force of native-born, part-time, seasonal
and day laborers, although the system was more widespread in during the earlier stages of
industrialization (Sellek 1996: 254). This casual and readily disposable labor force served as an
economic cushion for Japanese companies, giving them the flexibility needed to adjust to
business cycles. As the supply of Japanese female part-timers and internal seasonal migrants
(dekasegi workers) became insufficient during Japan's severe labor shortage in the late 1980s, the
increasing number of immigrant workers began to supplement them. A number of Japanese
assen gaisha began to broker foreign workers as well, while new labor broker firms were also
established that dealt exclusively with foreign laborers. As a result, foreigners are increasingly
entering the marginal sector of the Japanese labor market, which was traditionally reserved
exclusively for casual Japanese laborers (see Stevens 1997). In fact, most Japanese employers
prefer nikkeijin workers to part-time or temporary Japanese hi-seishain, because the nikkeijin work harder and more seriously, put in longer hours, and are more willing to do overtime, night shifts, and physically arduous tasks.

Labor brokers constitute the indirect employment system (kansetsu koyo) for foreign workers in Japan and are most active among the nikkeijin. The nikkeijin are technically hired by these labor broker firms, which then place them in various Japanese companies. Not only do these labor brokers give the nikkeijin direct access to a wide range of jobs; they also handle the paperwork needed to acquire a visa and finance all travel expenses, which are later deducted from the workers’ salaries. Labor brokers also provide housing, transportation to work, medical and accidental insurance, and an array of other employment and social services. Labor brokerage has become a highly profitable business in Japan, since brokers charge heavy fees for their services and deduct a considerable amount from the hourly wages of the nikkeijin. Labor brokers have been known to abuse nikkeijin workers by charging exorbitant fees and kickbacks, refusing to pay wages, withholding passports (to ensure that nikkeijin workers do not leave the broker), and deceiving them with false promises about high wages and favorable working conditions.

The indirect, broker-based employment system enables Japanese companies to conveniently use the nikkeijin workers as a disposable labor force that can be expanded or shrunk at will, enabling companies to adjust to constant fluctuations in production in a cost-effective manner. Since the broker firm employs the nikkeijin, Japanese companies simply "borrow" a certain number of them from a broker for a limited period of time when production increases. When the workers are no longer needed, they are conveniently "returned" to the broker firm, which then transfers the excess workers to another company that needs their labor. Since they
are employees of the broker firm and do not belong to the companies at which they work, the nikkeijin’s situation contrasts sharply with that of regular seishain workers who are hired directly by the company and gradually promoted over time to higher positions with better salaries. Instead, Japanese employers simply pay the outside broker firm a certain amount of money for the temporary use of its laborers. As a result, even if the nikkeijin stay in a certain company for an extended period of time, they do not receive any substantial pay raise. This also means that as long as the nikkeijin remain employees of broker firms, a longer stay in Japan also does not result in gradually higher salaries, since they are simply transferred from one company to another at a fixed wage rate.

Although some Japanese companies employ nikkeijin workers directly rather than through labor brokers, they remain a distinct minority. Various labor brokers and employment agencies (local employment stability offices as well as the Nikkeijin Employment Center in Tokyo) estimate that about 80 percent of the nikkeijin rely on labor brokers to find work in Japan. Despite the high fees and occasional abuses, most nikkeijin workers choose labor brokers over direct employment by Japanese companies for a number of reasons. Brokers generally offer extensive employment, housing, and other services to the nikkeijin (all in Portuguese) that few Japanese employers can match. In addition, since each broker firm has extensive contacts with numerous Japanese companies, this gives the nikkeijin instant and easy access to a wide range of jobs at various firms, to an extent that would be impossible if they had to find and apply to each of these employers individually. Not only does the labor broker system greatly facilitate the employment search in this manner, it also provides greater job security (especially during a recession). When nikkeijin workers are dismissed at a given company, their broker simply transfers them to a different company, enabling them to avoid unemployment. Nikkeijin who
wish to change jobs for personal reasons are also frequently accommodated. Since labor brokers are much more pervasive in Brazil and in Japan than companies or agencies that employ nikkeijin directly, most new nikkeijin workers from Brazil are automatically channeled into the brokerage system. According to local employment security offices and the Nikkeijin Employment Center, the number of nikkeijin who inquire at their offices to seek direct employment has increased with the prolonged recession (mainly because they have lost their previous jobs), but there is no indication that the general reliance on labor brokers among the nikkeijin is diminishing.

In turn, Japanese employers generally favor the indirect broker employment system because it is more convenient than directly hiring nikkeijin workers themselves. Because brokers recruit the nikkeijin, take care of their visas, and provide them with housing, transportation, insurance, and other services, the employer does not incur these obligations. In fact, all that the employer has to do is to submit a request for a certain number of workers and pay the broker firm. In addition, because employers can readily "borrow" and then "return" nikkeijin workers to the broker firm, brokered nikkeijin are sometimes much more cost-effective than nikkeijin who have been hired directly under contracts and cannot be readily dismissed during a decline in production. Although some employers avoid brokers because of their murky legal status and abuses, most seem to succumb to the system's convenience. One Japanese employer candidly described the benefits of relying on the broker system to obtain nikkeijin labor:

The labor broker system is by far the most convenient means of getting the labor we need for temporary purposes. We call a local broker one day and tell him we need X number of additional workers. In a few days, the broker deposits the necessarily number of workers at our doorstep. When we no longer need the nikkeijin, we call the broker again, and they take back the workers almost at a moment's notice. If we were to hire the nikkeijin ourselves, we would have to find them through personal contacts or ads, interview them, then provide them with housing and take personal care of them. When we want to get rid of them,
we would have to wait until their contracts expire. With brokers, they take care of all this for us. Now we get most of our nikkeijin workers from brokers and have reduced the number of those who are directly employed.

Because of these various incentives for both nikkeijin workers and their employers, it is evident that the nikkeijin will continue to be employed primarily through the labor broker system. Since brokered workers are always utilized as a readily disposable and informal labor force of outside contract workers who are temporarily “borrowed” and “returned” according to fluctuations in production, as long as nikkeijin remain dependent on the labor broker system, they will be confined the peripheral sector of the Japanese labor force. Workers who are employed through labor brokers are constantly shifted from one company to another and are hardly ever hired permanently as regular workers by Japanese firms and placed on the promotion track with regular salary increases (see Nishizawa 1995). As a result, regardless of how long the nikkeijin remain in Japan or with the same employer, they do not experience a substantial increase in wages.11 Although the proportion of non-nikkeijin foreign workers who rely on labor brokers is substantially smaller, they face the same conditions of perpetual marginalization as temporary and unskilled workers who fill casual and disposable jobs with little hope for regular promotion and gradual salary increases over time. Indeed, the involvement of brokers in the recruitment of foreign workers in general in Japan is increasing rather than diminishing (Iguchi 1998).12

Foreign workers who are employed directly by Japanese companies (chokusetsu koyo) without the mediation of labor brokers are in a somewhat different situation. The abuses of the broker system are completely eliminated and the companies themselves assume the necessary

11 Again, the only individuals who receive a substantial promotion and better salaries are the small minority of bi-lingual nikkeijin who become translators and cultural intermediaries.

12 The Japanese Ministry of Labor’s annual survey of employers who use foreign-born workers found that the average number of indirectly employed (“brokered”) foreign workers per firm increased from 20.8 to 22.5 from 1999-2000, while the number of directly employed (“non-brokered”) foreign workers was up from 6.6 to 6.9 in the same period. The survey results can be accessed at http://www.jil.go.jp/kisya/syokuan/20001204_02_sv/20001204_02_sv.html.
housing, transportation, and other related costs. Since foreign workers hired directly are employees of the company (and not outside workers borrowed from a broker firm), they are usually given short-term contracts (for the nikkeijin, the contract usually lasts from six months to a year with the possibility of renewal). As a result, they usually stay at one firm for a longer period of time and the turnover rate is considerably lower than for brokered foreign workers.\footnote{\textsuperscript{13}}

Although immigrant workers employed directly by the firm tend to be more stable, they remain a temporary and disposable labor force of short-term contract laborers and do not become permanent seishain workers who are placed on the regular promotion track. As a result, when production levels decline, employers simply dismiss them after their contract period expires. This is true even for those foreign workers who have remained at the same firm for an extended period of time. The perception among Japanese employers that nikkeijin are strictly a temporary and peripheral labor force (undoubtedly reinforced by their propensity to switch jobs frequently) persists and stigmatizes even those who have apparently made a long-term commitment to a certain firm. Since employers remain uncertain about whether the nikkeijin will leave the firm in the future (or return to Brazil), they are reluctant to make them permanent and regular seishain. The inability of most nikkeijin to speak Japanese proficiently may be another barrier that prevents them from being treated equally with regular Japanese employees. In fact, only one informant in Tsuda's sample had become a seishain at his company. This individual had not only remained at the same company during his entire stay in Japan (five and a half years), he had decided to remain in Japan indefinitely, had made an unequivocal commitment not to leave the firm, and spoke Japanese almost fluently.

\footnote{\textsuperscript{13} In one survey of nikkeijin workers by the Japan Statistics Research Institute, 48.5 percent of those employed by brokers had changed jobs, while the percentage was only 21.2 percent for those employed directly (Yamamoto 1994).}
Thus, length of residence and employment in Japan do not correlate with higher immigrant wages for a number of reasons. Because of their perceived “temporary” status, the tendency to switch jobs frequently (especially among nikkōijin), and their employment through labor brokers and short-term contracts, foreign workers in Japan remain a marginal and informal labor force restricted to unskilled, temporary jobs. As a result, they do not advance to more skilled, higher-level jobs and experience any substantial increase in wages over time.

Length of stay in the United States and labor-market experience have a much greater impact on immigrants’ wages in San Diego County because the immigrant labor market is much more differentiated. Although some immigrant workers in San Diego remain casual and temporary laborers, a much wider range of jobs is available to them in terms of occupational categories and skill level, and a much higher proportion of these jobs are permanent or at least long-term in character (see Cornelius 1998). In addition, there is no entrenched system of labor brokers that encourages employers to use immigrant workers as an informal and temporary labor force to be conveniently hired and fired according to fluctuations in production. Thus, many immigrants in San Diego County work for extended periods at the same company and move up the job ladder, which has a significant impact on wages over time.

Ascribed Human Capital and Wages

Although immigrant workers in Japan confined mostly to unskilled, temporary jobs where achieved human capital makes little difference, some are able to find higher-paying jobs within this peripheral labor market. However, what enables certain immigrants to obtain these jobs is not personal abilities and credentials acquired over time but ascribed human capital (characteristics that have been inherited or assigned by birth, which cannot be obtained by
personal effort, ability, or experience). The two ascribed human capital attributes that significantly increase immigrant wages in Japan are gender (male) and ethnicity (nikkeijin).

These ascribed attributes are key determinants of wages because Japan is a country with strong gender and ethnic discrimination, which significantly disadvantages women and ethnic groups of non-Japanese descent. Women in Japanese society face considerable wage and labor market discrimination because of persisting traditional gender attitudes, according to which they are expected to dedicate themselves to the family and household at the expense of a personal career and to stop working once they get married and have children. Because their career aspirations are not taken as seriously as men, they are mostly relegated to part-time jobs or subordinate occupational positions and face significant barriers to promotion. Not only have women been unable to obtain jobs at the same level as men, they are paid less for the same type of job. As a result, a significant gender gap in wages persists, despite anti-discrimination laws\textsuperscript{14} and more frequent litigation by Japanese women.

Although both male and female foreign workers in Japan are employed in predominantly unskilled jobs, men earn 30 percent more than women. For some groups of immigrants, women are in a different line of work than men. For example, among foreign workers from certain Southeast Asian countries (especially the Philippines), a substantial proportion of women work as bar hostesses and "entertainers," while men work in factories or in construction. However, for other groups like the nikkeijin, women frequently do the same types of jobs as men in the same factories,\textsuperscript{15} but men earn substantially higher wages. This is one of the principal grievances that

\textsuperscript{14} Japan has ratified the 1985 United Nations Convention on the Elimination of all Forms of Discrimination against Women (CEDAW).

\textsuperscript{15} Certain manufacturing industries that require more physically demanding labor tend to rely more on male nikkeijin workers. As expected, most nikkeijin workers in construction are men.
ikutu women have in Japan. In contrast, there is much less gender discrimination in the San Diego immigrant labor market, where men earn only 4.5 percent more than women.

Similarly, ethnicity has a larger effect on wages among immigrants in Hamamatsu than in San Diego. In relatively monoethnic countries with high ethnic discrimination like Japan, immigrant groups of the same racial descent as the native-born population can be highly favored over other foreigners and enjoy considerably better employment and wage conditions. This is because the maintenance of ethnic homogeneity is highly valued and seen as critical for the country's prosperity and social harmony.

In Japan, the *nikkeijin* ("ethnic Japanese") from South America are, by far, the most preferred among all foreign workers. Both employers and labor brokers give first priority to them when hiring foreign workers. Since the *nikkeijin* workers are in the greatest demand, Japanese employers have to pay high wages in order to attract them and prevent them from moving to firms that offer better wages.\(^\text{16}\) Hourly wages for some *nikkeijin* equal or exceed those of Japan-born workers (Mori 1994: 627), and only the larger and more reputable companies are generally able to afford them. In our Hamamatsu sample, *nikkeijin* wages were 25 percent higher than those of other foreign workers.

A key reason why the *nikkeijin* are preferred over other foreign workers is undoubtedly their legal status: They are, by far, the largest group of legally admitted foreign workers in Japan. However, this preference also has an important ethnic component. Many employers feel a certain amount of cultural affinity with the *nikkeijin* because they are Japanese descendants. In

\(^{16}\) During the height of the Japanese labor shortage in the late 1980s, companies sometimes offered such amenities as furnished apartments, free utilities, free plane tickets to Brazil (for visits), and other perks to retain their *nikkeijin* workers.
other words, the nikkeijin are assumed to be the most culturally Japanese, making them more desirable as workers. As one Hamamatsu employer put it,

We have both nikkeijin and non-nikkeijin workers at our firm, but we notice that the nikkeijin have a better work ethic. Those with Japanese blood are more diligent. They think more like the Japanese and are easier to relate to. The nisei [second generation] are the most orderly and punctual because their parents are Japanese. As you get further away in terms of generation, they become more Brazilian and don't work as seriously. They quit their jobs if the salary is better elsewhere because they care more about economic benefit than human relations. But they are still better than complete foreigners, who have no ninjo [Japanese human feeling].

Such attitudes are based on a common assumption that those who are "racially" Japanese will also be "culturally" Japanese to a certain extent, because they have been raised by Japanese parents (see Kondo 1986; Tsuda 1998; Tsuda, forthcoming-a). In fact, a substantial number of employers whom we interviewed in Hamamatsu preferred nikkeijin workers who spoke very little Japanese over non-nikkeijin foreigners who spoke some Japanese. One labor broker claimed that about 50 percent of his corporate clients preferred nikkeijin workers over all other foreigners, even if they did not speak Japanese at all. In others words, ascribed ethnic human capital is so valued by employers in some cases that it completely overrides achieved linguistic human capital, even if the later is technically more relevant to job performance. Consider the comments of one Japanese employer, who expressed an extreme version of a general view that was not uncommon among his colleagues:

I always hire nikkejin workers before I look at other foreigners. Because the nikkeijin are of the same blood, they share some Japanese values and we feel a sense of affinity to them, even if they don't speak the language. We may be able to more easily explain work instructions to foreigners [of non-Japanese descent] who speak Japanese, but they are in general no good. They aren't as majime [honest, serious] and reliable.

The ethnic preference for Japanese descendants is so strong that Japanese employers generally prefer pure Japanese descent nikkejin over nikkeijin of mixed descent. Employers and
labor brokers often emphasize that when interviewing nikkeijin for a job, they look at the "face" of the applicant. According to one labor broker,

After we check their visa status and see if they can understand Japanese, we look at their faces closely to see if they are pure Japanese descent or look like they are mixed-blood. Most companies prefer workers who have a more Japanese face. Although a few employers denied that they discriminated on this basis, many expressed such ethnic preferences. Some claimed that those of mixed blood are less culturally Japanese, are less easy to relate to, and have more undesirable attributes. Among nikkeijin workers, it was general knowledge that the mestíços have a harder time finding jobs in Japan. In fact, some mestíços who look sufficiently Japanese "pass" as pure Japanese descendants (and hide their mixed descent background) in order to improve their employment prospects. Even among pure Japanese-descent nikkeijin, there is even some employer preference for nisei (second generation) over sansei (third generation) nikkeijin.

Employers of nikkeijin workers generally favored Brazilian nikkeijin over Peruvian nikkeijin. In general, the Peruvian nikkeijin do not speak Japanese as well as the Brazilian nikkeijin, and a higher proportion are of mixed descent. In fact, a substantial percentage of the Peruvians are not of Japanese descent at all, but enter Japan as "fake nikkeijin" with false documents. Because Peruvian nikkeijin are less preferred by Japanese employers, they earn lower wages than their Brazilian counterparts and are three times more likely to be fired (Kitagawa 1993:78).

Smaller and less established subsidiary firms unable to afford nikkeijin generally have to settle for less (ethnically) desirable foreign workers, such as those from East or Southeast Asia and the Middle East, who earn progressively lower salaries (Kajita 1994:73). The comments of one small employer illustrates this quite well:
We're always being pressured by our parent company, which keeps telling us, “lower your costs, lower your costs.” But we small companies, unlike medium-sized businesses, can't afford nikkeijin wages. So we have to hire Asians [foreigners from Asia] or even Iranians. If it's Iranians, they are cheap and work hard. We can't do without them.

The existence of this hierarchy of ethnic preference (basically correlated with wage levels) was acknowledged by another employer:

When it comes to hiring foreigners, there are clearly several levels based on like and dislike. We feel the closest to the nikkeijin, so they work at the best firms with the best wages. Then come Chinese and Koreans, whom we find less preferable and therefore, they work in less desirable jobs. At the bottom are Bangladeshis and Iranians, who work in the smallest companies that pay the lowest wages. We avoid interacting with Middle Easterners the most, so they get the worst jobs. It really shouldn't be this way, but it just is.

Because of such strong ethnic preferences based on shared racial origins, even immigrant minority groups that are culturally Japanese but of foreign descent can still face considerable ethnic discrimination on the labor market. For instance, although most members of Japan's Korean-Japanese ethnic minority have been born and raised in Japan and are culturally indistinguishable from majority Japanese, they continue to be subject to serious employment discrimination simply because of their Korean descent and have not yet escaped from their socioeconomic marginalization (Weiner 1997:83).

While there is some evidence of an ethnic hierarchy of preference among San Diego County employers as well, it is not nearly as strong as in Hamamatsu and there is no single group of immigrants (comparable to the nikkeijin in Hamamatsu) who receive significantly higher wages than other fractions of the recent immigrant population. A substantial stratum of San Diego businesses preferentially hire Mexican or other Latino immigrants over native-born workers because of their perceived strong work ethic: 54 percent of the employers interviewed in
San Diego expressed the view that, in general, immigrants are more hard-working than native-born employees.

**The Economic and Social Functions of Immigrant Networks**

Another intriguing difference between the results from Hamamatsu and San Diego relates to the impact of migrant social networks on wages. In Hamamatsu, foreign workers who found jobs through relatives or friends received wages that were 20 percent higher whereas those who used social networks to obtain employment in San Diego received wages that were 8 percent lower. Similar to achieved and ascribed human capital variables, the impact of social networks on wages depends on the characteristics of the immigrants and of the labor markets into which they have been incorporated.

Since most foreign workers in Japan consider themselves to be temporary migrant workers, they wish to earn as much money as possible during their sojourn. As a result, they use their social networks of relatives and acquaintances primarily to find higher-paying jobs with more overtime. For instance, nikkeijin workers constantly exchange and compare information with acquaintances about the wages and hours of overtime offered at other firms, and they quickly switch to those firms if compensation is higher there. Nikkeijin who move to other areas of Japan are frequently asked by their acquaintances to inform them about better-paying jobs elsewhere. As a result, foreign workers who have less extensive social networks in Japan have fewer opportunities to find better-paying jobs and tend to be stuck with lower wages. In other words, the social networks of the nikkeijin primarily serve an instrumental, economic function: to secure a succession of higher-paying jobs, in order to maximize economic returns in a limited period of time.
Why do social networks lead to higher-paid jobs among foreign workers in Hamamatsu while generating “negative social capital” (Portes 1998: 15-18) for immigrant workers in San Diego, lowering wages by about 8 percent? As long as foreign workers consider themselves to be temporary migrants driven by a strictly economic mentality, they tend to shift from one job to another in search of the highest wage. However, once they decide to remain long-term or permanently in the host country, such purely instrumental motives begin to subside. In contrast to Hamamatsu, the proportion of self-reported permanent settlers is much higher among foreign workers in San Diego (63.9 percent versus 9 percent). Instead of dedicating their lives exclusively to work and attempting to earn as much as possible, such long-term immigrants become more concerned with quality of life issues and social wellbeing. In addition, as they become less obsessed about earning the highest possible wage by switching firms, they remain for longer periods at a certain job. As a result, they no longer focus exclusively on the wages they receive, but also begin to value working and social conditions on the job.

Accordingly, immigrant social networks in San Diego are used for more diverse social purposes, going beyond simply providing access to better-paying jobs. For instance, through their extensive social networks, Mexican immigrants locate jobs with socially satisfying conditions, at companies where Spanish is the predominant language and whose work force includes clusters of relatives and friends. The owner of the firm is more likely to be a Mexican immigrant as well. Immigrant-owned businesses in San Diego almost exclusively have immigrant (often co-ethnic) labor forces and tend to pay lower wages, holding constant other relevant firm characteristics (Cornelius 1998: 122-125). However, labor turnover rates in immigrant-owned businesses in San Diego are lower than in U.S. native-owned firms, which
suggests that the incentives of a workplace culture in terms of ethnic solidarity, ease of communication in the native language, and family ties offset any economic disadvantages.

In sum, immigrants in San Diego seem to use their social networks less for narrowly instrumental economic purposes (to find jobs with higher wages) and more for expressive social motives (to find jobs with ethnically satisfying working conditions). Although such jobs may pay slightly lower wages, immigrant workers are compensated in other ways.

**Conclusion: Marginality, Human Capital, and Social Mobility**

Our comparative analysis suggests that the relative impact of achieved versus ascribed human capital variables on immigrant wages depends heavily on the specific immigrant labor market and employment system that operates in a particular country. Although it seems self-evident that immigrant wages are determined by achieved human capital endowments and past employment experience, this generalization seems to apply only to immigrant labor markets that have reached a certain level of internal diversity and not to those that are still relatively homogeneous. In Japan, foreign workers are predominantly found in uniformly unskilled, low-level, and temporary jobs for which the human capital that immigrants have acquired (education, language competence, time spent in Japan, employment experience) has little relevance and does not lead to better jobs with higher wages.\(^{17}\)

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\(^{17}\) The inability of achieved human capital to influence immigrant wages also explains why increased age does not result in higher wages either (again in contrast to the San Diego situation). Since the previous background of the immigrant is not considered when hiring, older workers (with more educational and occupational experience) are not given better jobs with higher wages. Instead, both older and younger immigrants are employed in similar, temporary, unskilled jobs at the entry level with comparable wages. In addition, since many *nikkeijin* are sojourners and not permanent residents, age also does not necessarily correlate with longer residence or employment in Japan. At any rate, we have seen that neither length of stay in Japan nor length of employment at a certain firm leads to promotions or higher wages.
Immigrants are concentrated in the peripheral labor market in Japan partly because of the nature of the employment system and partly because of the immigrants’ sojourner mentality. Because foreign workers are hired either through labor brokers or on short-term contracts, the Japanese employment system strongly encourages the casual use of immigrant labor. In addition, since foreign workers generally see themselves (and are seen) as temporary *dekasegi* who wish to earn as much as possible in a short period of time, they do not remain at the same job for very long. In turn, the high self-initiated turnover rate (especially among the *nikkeijin*) facilitates their use by employers as an informal, disposable labor force that can be conveniently adjusted according to business cycles. Even those foreign workers who have remained with the same employer for a considerable period are still regarded as temporary, casual workers and are not made into regular, permanent *seishain*.

In this manner, foreign workers are effectively confined to low-level and temporary jobs on the economic periphery and remain unable to incorporate themselves into the regular labor market where wages can be expected to increase over time according to personal background, ability, and experience. Therefore, individuals who have acquired human capital (either previously, or in Japan) are not rewarded with higher-level jobs with better incomes, as is usually the case. In the case of Japanese firms, it is unlikely that a “jobs ladder” for foreign workers will begin to emerge as long as they are utilized as temporary reserve workers by the labor brokerage system, are directly employed only as short-term contract laborers by Japanese companies, and regard themselves as temporary *dekasegi* migrant workers. For those immigrants who resolve to stay indefinitely or permanently in Japan, this seriously inhibits their long-term economic mobility (in terms of occupational status and wages).
In the absence of a significant relationship between achieved human capital and wages among foreign workers in Japan, only ascribed human capital has a significant impact on income levels. Instead of personal credentials which can be acquired by individuals over time, it seems that predetermined characteristics, such as gender (being male) and ethnicity (being nikkeijin), are what provides access to better jobs with higher salaries within the limited confines of the peripheral labor market. In a country with significant gender discrimination that continues to cherish and insist on ethnic homogeneity, Hamamatsu employers strongly value and prefer men over women and ethnically similar nikkeijin over non-Japanese-descent foreigners as employees, and are willing to pay higher wages to acquire such workers.

In the case of San Diego County, there is much more diversity both among immigrants and the jobs available for them. Although the San Diego immigrant pool does include short-term sojourners and repeat migrants, there are many more long-term immigrants or permanent settlers who are not as prone to constantly change jobs. As a result, immigrants are not invariably perceived by their employers as strictly temporary workers. In addition, labor brokers who promote the casual use of immigrant labor do not have a significant presence in the San Diego labor market, and the vast majority of immigrants are not hired as short-term contract workers.

Compared to Hamamatsu, San Diego’s immigrant labor market has a greater variety job types, ranks, skill levels, and degrees of employment stability. Because immigrants are not confined to temporary employment on the periphery of the labor market, achieved human capital is rewarded by employers, enabling at least some immigrants to escape entry-level jobs and advance to higher-status, more stable, and better-paying positions through the acquisition of human capital (especially English language competence). When compared to the importance of
achieved human capital, acquired human capital (gender and ethnicity) seems to have much less effect on wages in San Diego.

In addition to achieved and ascribed human capital, the impact of immigrant social networks on wages also varies considerably according to differences in the characteristics of immigrants and the labor markets in which they are embedded. Because of the preoccupation among temporary-minded dekasegi migrants in Japan with maximizing their short-term economic returns, not only do they switch jobs frequently for better wages and more overtime, they use their personal social networks to do so. As a result, jobs that are found through relatives and acquaintances have substantially better wages. In San Diego, a much higher proportion of immigrants intend long-term and permanent residence in the United States, and these “settlers” tend to utilize their personal networks to find jobs with more satisfying working and social conditions (with relatives and friends working at the same firm), even if it means accepting a slightly lower wage.

Since immigration to Japan is still in its incipient stages, it remains to be seen whether immigrant labor markets in Japanese cities like Hamamatsu will eventually evolve toward the San Diego model. Does contemporary Japan represent a general first stage in the development of immigrant labor markets where foreign workers are initially confined to marginal jobs? As the number of immigrants increases, permanent settlement becomes more common, and immigrants make more long-term commitments to their jobs, do they invariably escape the peripheral sectors of the economy and enter the mainstream labor market? Does an initially restricted immigrant labor market always become more diversified and varied over time, enabling immigrants to use their achieved human capital to improve their occupational level and
income? Or, can foreign workers in certain countries be perpetually marginalized as an unskilled, temporary, and causal labor force?

In the near future, it is likely that foreign workers in Japan will continue to be confined to the peripheral job market where achieved human capital is not related to higher wages. This is not just the result of a deeply institutionalized system of labor brokerage, which employs foreign workers as a marginal and readily disposable work force. In addition, there has been a long-term casualization of the Japanese labor market, due to the increasing demand in the Japanese economy for a cost-effective, informal labor force of temporary workers. Japanese companies have been under considerable pressure to "restructure" (called risutora in Japanese) by increasing efficiency, downsizing, and streamlining in order to cut production costs in the face of rising international competition. However, because Japanese firms have traditionally been unwilling to fire their regular workers directly (Dore 1986:93), they have relied on a large casual and flexible labor force to reduce production costs. Before the arrival of foreign workers, the growing demand for more informal and temporary workers in the economy led to a dramatic increase in Japanese seasonal and contract laborers, female part-time workers, and day laborers. However, the number of temporary domestic workers quickly became insufficient and foreign workers are now increasingly supplying the expanding informal sector of the Japanese economy. In contrast to regular Japanese workers, foreign workers hired on short-term

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18 Japanese companies (especially the larger ones) rarely eliminate excess workers by direct layoffs but usually rely on natural attrition (waiting for workers to retire or quit). Other means include encouraging early retirement and moving unnecessary workers to subsidiary firms. This inability of companies to sufficiently downsize and streamline their workforces has been one major reason why the Japanese economy has been unable to recover from a decade-long recession.

19 Since the 1970s, the proportion of part-time workers has steadily increased, especially among women (see Cornelius 1995: 405). For instance, in 1980, there were only 5,403,000 part-time female workers, whereas by 1992, the number had jumped almost threefold to 14,456,000.

20 In 1990, the demand/supply ratio for part-time workers was 4 to 1.
contracts or temporarily borrowed from labor brokers are more cost-effective because they generally are not paid bonuses or other benefits.\textsuperscript{21} In addition, they can be quickly disposed of during a decline in production unlike regular workers, whom the employer is obligated to retain at considerable cost even when they are not needed.

In the continuing effort to restructure and become competitive in an expanding global free market (and thus, recover from the current recession), Japanese companies will become increasingly dependent on such casual immigrant labor as one important means to raise productivity and reduce costs. The reliance of Japanese companies on temporary workers has traditionally increased during periods of economic uncertainty (Dore 1986:96). Also, as Japanese manufacturers continue to shift production abroad to Third World countries, Japan's domestic economy, like other industrialized countries before it, will continue to shift from industrial manufacturing to a service-based economy, which also relies heavily on casual and unskilled workers (Sassen 1991).

As long as this increasing demand for an informal labor force persists, it appears that foreign workers in Japan will continue to be channeled exclusively into the peripheral labor market of temporary, unskilled, and low-level jobs for which human capital acquired by immigrants does not translate into occupational advancement and higher wages. Because of these structural economic conditions, it will be some time before Japan’s immigrant workers are able to overcome their marginalization in the labor market. Only then will achieved human capital become effective as a means to attain better jobs and salaries, allowing immigrants to become gradually incorporated into mainstream Japanese society through social mobility.

\textsuperscript{21} Although \textit{nikkeijin workers}, the highest paid of all foreign workers in Japan, sometimes earn hourly wages equal to or higher than Japanese regular workers, they are still cheaper to employ because of the lower cost of benefits and bonuses.


Iguchi, Yasushi (1998) “International Migration in East Asia: A Growing Challenge for Japan,” paper presented at the Fall Workshop of the University of California Comparative Immigration and Integration Program, University of California-Davis, October 9-10.


Table 1: Definition and Characteristics of Variables Used in Hamamatsu Wage Determination Model

<table>
<thead>
<tr>
<th>Variable</th>
<th>Measurement</th>
<th>Expected sign</th>
<th>Mean</th>
<th>Std. Dev.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female (dummy)</td>
<td>Female = 1, Male = 0</td>
<td>-</td>
<td>0.429</td>
<td>0.496</td>
</tr>
<tr>
<td>Age</td>
<td>Years</td>
<td>+</td>
<td>30.313</td>
<td>8.649</td>
</tr>
<tr>
<td>Years of education</td>
<td>Years</td>
<td>+</td>
<td>12.719</td>
<td>3.585</td>
</tr>
<tr>
<td>Speaks/understands Japanese well (dummy)</td>
<td>Yes = 1, No = 0</td>
<td>+</td>
<td>0.415</td>
<td>0.494</td>
</tr>
<tr>
<td>Time lived in Japan</td>
<td>Months</td>
<td>+</td>
<td>46.475</td>
<td>31.062</td>
</tr>
<tr>
<td>Working illegally in Japan (dummy)</td>
<td>Illegal = 1, Legal = 0</td>
<td>-</td>
<td>0.065</td>
<td>0.246</td>
</tr>
<tr>
<td>Found job through friend/relative (dummy)</td>
<td>Yes = 1, No = 0</td>
<td>+,-</td>
<td>0.410</td>
<td>0.493</td>
</tr>
<tr>
<td>Found work through labor broker (dummy)</td>
<td>Yes = 1, No = 0</td>
<td>+,-</td>
<td>0.350</td>
<td>0.478</td>
</tr>
<tr>
<td>Years with current employer</td>
<td>Years</td>
<td>+</td>
<td>1.871</td>
<td>1.754</td>
</tr>
<tr>
<td>Nikkeijin (foreigner of Japanese ancestry)</td>
<td>Nikkeijin = 1, non-Nikkeijin = 0</td>
<td>+</td>
<td>0.751</td>
<td>0.433</td>
</tr>
<tr>
<td>Construction sector (dummy)</td>
<td>Yes = 1, No = 0</td>
<td>-</td>
<td>0.023</td>
<td>0.150</td>
</tr>
<tr>
<td>Manufacturing sector (dummy)</td>
<td>Yes = 1, No = 0</td>
<td>-</td>
<td>0.783</td>
<td>0.413</td>
</tr>
<tr>
<td><strong>Dependent Variable:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Log hourly wage</td>
<td>Natural log of hourly wage</td>
<td></td>
<td>2.341</td>
<td>0.384</td>
</tr>
</tbody>
</table>
Table 2: Regression of Personal and Firm Characteristics on Foreign Workers’ Hourly Log Wage: Hamamatsu

<table>
<thead>
<tr>
<th>Independent Variable</th>
<th>B</th>
<th>Std. error</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female (dummy)</td>
<td>-0.30879</td>
<td>0.04648</td>
<td>0.00000</td>
</tr>
<tr>
<td>Age</td>
<td>0.00073</td>
<td>0.00580</td>
<td>0.90041</td>
</tr>
<tr>
<td>Time lived in Japan</td>
<td>0.00310</td>
<td>0.00340</td>
<td>0.36193</td>
</tr>
<tr>
<td>Age*Time (interaction term)</td>
<td>-0.00006</td>
<td>0.00010</td>
<td>0.53690</td>
</tr>
<tr>
<td>Years of education</td>
<td>0.00465</td>
<td>0.00665</td>
<td>0.48514</td>
</tr>
<tr>
<td>Speaks/understands Japanese well (dummy)</td>
<td>0.03025</td>
<td>0.05193</td>
<td>0.56084</td>
</tr>
<tr>
<td>Working illegally in Japan illegally (dummy)</td>
<td>-0.11035</td>
<td>0.10821</td>
<td>0.30906</td>
</tr>
<tr>
<td>Found job through friend/relative (dummy)</td>
<td>0.19108</td>
<td>0.05814</td>
<td>0.00119</td>
</tr>
<tr>
<td>Found job through labor broker (dummy)</td>
<td>0.16466</td>
<td>0.06308</td>
<td>0.00972</td>
</tr>
<tr>
<td>Years with current employer</td>
<td>-0.00264</td>
<td>0.01362</td>
<td>0.84664</td>
</tr>
<tr>
<td>Nikkeijin</td>
<td>0.25796</td>
<td>0.06337</td>
<td>0.00007</td>
</tr>
<tr>
<td>Construction sector (dummy)</td>
<td>-0.21920</td>
<td>0.16218</td>
<td>0.17802</td>
</tr>
<tr>
<td>Manufacturing sector (dummy)</td>
<td>-0.28020</td>
<td>0.06587</td>
<td>0.00003</td>
</tr>
<tr>
<td>(Constant)</td>
<td>2.24021</td>
<td>0.19534</td>
<td>0.00000</td>
</tr>
</tbody>
</table>

Note: Coefficients are unstandardized ordinary least-square regression coefficients.
The industrial sector reference group is the service sector.
Number of cases: 217
R square: 0.319
Adjusted R square: 0.275
Standard error of estimate: 0.3267

Source: Survey of 336 foreign workers employed in Hamamatsu, Japan, in April-June 1996, conducted by researchers affiliated with the Institute for Statistical Research (Tokyo), in collaboration with the Center for U.S.-Mexican Studies, University of California-San Diego.
Table 3: Definition and Characteristics of Variables Used in San Diego Wage Determination Model

<table>
<thead>
<tr>
<th>Variable</th>
<th>Measurement</th>
<th>Expected sign</th>
<th>Mean</th>
<th>Std. Dev.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female (dummy)</td>
<td>Female = 1, Male = 0</td>
<td>-</td>
<td>0.330</td>
<td>0.471</td>
</tr>
<tr>
<td>Age</td>
<td>Years</td>
<td>+</td>
<td>34.590</td>
<td>10.174</td>
</tr>
<tr>
<td>Years of education</td>
<td>Years</td>
<td>+</td>
<td>8.591</td>
<td>4.042</td>
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<tr>
<td>Speaks English well (dummy)</td>
<td>Yes = 1, No = 0</td>
<td>+</td>
<td>0.338</td>
<td>0.474</td>
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<tr>
<td>Time lived in United States</td>
<td>Months</td>
<td>+</td>
<td>143.665</td>
<td>96.592</td>
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<tr>
<td>Found job through friend/relative (dummy)</td>
<td>Yes = 1, No = 0</td>
<td>+,-</td>
<td>0.692</td>
<td>0.462</td>
</tr>
<tr>
<td>Working illegally in U.S. (dummy)</td>
<td>Illegal = 1, Legal = 0</td>
<td>-</td>
<td>0.584</td>
<td>0.493</td>
</tr>
<tr>
<td>Years with current employer</td>
<td>Years</td>
<td>+</td>
<td>4.668</td>
<td>4.734</td>
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<tr>
<td>Annual labor turnover rate in workplace</td>
<td>Percent</td>
<td>-</td>
<td>14.835</td>
<td>16.866</td>
</tr>
<tr>
<td>Percentage of foreign workers in workplace</td>
<td>Percent</td>
<td>+,-</td>
<td>68.861</td>
<td>24.000</td>
</tr>
<tr>
<td>Needs English in job (dummy)</td>
<td>Yes = 1, No = 0</td>
<td>+</td>
<td>0.378</td>
<td>0.486</td>
</tr>
<tr>
<td>Natives apply for same kind of job (dummy)</td>
<td>Yes = 1, No = 0</td>
<td>+,-</td>
<td>0.408</td>
<td>0.492</td>
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<tr>
<td>Agriculture sector (dummy)</td>
<td>Yes = 1, No = 0</td>
<td>+</td>
<td>0.126</td>
<td>0.332</td>
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<tr>
<td>High tech manufacturing sector (dummy)</td>
<td>Yes = 1, No = 0</td>
<td>+</td>
<td>0.094</td>
<td>0.292</td>
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<tr>
<td>Construction sector (dummy)</td>
<td>Yes = 1, No = 0</td>
<td>+</td>
<td>0.091</td>
<td>0.288</td>
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<td>Hotel &amp; motel sector (dummy)</td>
<td>Yes = 1, No = 0</td>
<td>+</td>
<td>0.083</td>
<td>0.276</td>
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<tr>
<td>Landscape and maintenance sector (dummy)</td>
<td>Yes = 1, No = 0</td>
<td>+</td>
<td>0.107</td>
<td>0.310</td>
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<tr>
<td>Apparel and textile sector (dummy)</td>
<td>Yes = 1, No = 0</td>
<td>+</td>
<td>0.121</td>
<td>0.326</td>
</tr>
<tr>
<td>Food processing sector (dummy)</td>
<td>Yes = 1, No = 0</td>
<td>+</td>
<td>0.137</td>
<td>0.344</td>
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<tr>
<td>Low-tech manufacturing sector (dummy)</td>
<td>Yes = 1, No = 0</td>
<td>+</td>
<td>0.113</td>
<td>0.317</td>
</tr>
<tr>
<td>Miscellaneous services sector (dummy)</td>
<td>Yes = 1, No = 0</td>
<td>+</td>
<td>0.035</td>
<td>0.184</td>
</tr>
</tbody>
</table>

**Dependent Variable:**
Log hourly wage                                      Natural log of hourly wage | 1.826  | 0.356    |
Table 4: Regression of Personal and Firm Characteristics on Foreign Workers’ Hourly Log Wage: San Diego County

<table>
<thead>
<tr>
<th>Independent Variable</th>
<th>B</th>
<th>Std. Error</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female (dummy)</td>
<td>-0.04165</td>
<td>0.03250</td>
<td>0.20090</td>
</tr>
<tr>
<td>Age</td>
<td>0.00759</td>
<td>0.00238</td>
<td>0.00159</td>
</tr>
<tr>
<td>Time lived in United States</td>
<td>0.00170</td>
<td>0.00054</td>
<td>0.00185</td>
</tr>
<tr>
<td>Age*Time (interaction term)</td>
<td>-0.00004</td>
<td>0.00001</td>
<td>0.00264</td>
</tr>
<tr>
<td>Years of schooling</td>
<td>0.00850</td>
<td>0.00425</td>
<td>0.04600</td>
</tr>
<tr>
<td>Speaks English well (dummy)</td>
<td>0.10100</td>
<td>0.03644</td>
<td>0.00587</td>
</tr>
<tr>
<td>Found job through friend/relative (dummy)</td>
<td>-0.08454</td>
<td>0.03061</td>
<td>0.00605</td>
</tr>
<tr>
<td>Working in U.S. illegally (dummy)</td>
<td>0.00987</td>
<td>0.03169</td>
<td>0.75551</td>
</tr>
<tr>
<td>Years with current employer</td>
<td>0.01522</td>
<td>0.00341</td>
<td>0.00001</td>
</tr>
<tr>
<td>Annual labor turnover rate (%) in workplace</td>
<td>-0.00302</td>
<td>0.00090</td>
<td>0.00089</td>
</tr>
<tr>
<td>Percentage of foreign workers in workplace</td>
<td>-0.00154</td>
<td>0.00075</td>
<td>0.04005</td>
</tr>
<tr>
<td>Needs English in job (dummy)</td>
<td>0.08842</td>
<td>0.03628</td>
<td>0.01530</td>
</tr>
<tr>
<td>Natives apply for same kind of job (dummy)</td>
<td>0.10101</td>
<td>0.03689</td>
<td>0.00649</td>
</tr>
<tr>
<td>Agriculture sector (dummy)</td>
<td>0.21104</td>
<td>0.06623</td>
<td>0.00157</td>
</tr>
<tr>
<td>High tech manufacturing sector (dummy)</td>
<td>0.20957</td>
<td>0.07247</td>
<td>0.00407</td>
</tr>
<tr>
<td>Construction sector (dummy)</td>
<td>0.49124</td>
<td>0.06635</td>
<td>0.00000</td>
</tr>
<tr>
<td>Hotel &amp; motel sector (dummy)</td>
<td>0.17038</td>
<td>0.07002</td>
<td>0.01546</td>
</tr>
<tr>
<td>Landscape and maintenance sector (dummy)</td>
<td>0.22519</td>
<td>0.06355</td>
<td>0.00045</td>
</tr>
<tr>
<td>Apparel and textile sector (dummy)</td>
<td>0.21528</td>
<td>0.06225</td>
<td>0.00061</td>
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<tr>
<td>Food processing sector (dummy)</td>
<td>0.18452</td>
<td>0.06330</td>
<td>0.00378</td>
</tr>
<tr>
<td>Low-tech manufacturing sector (dummy)</td>
<td>0.24864</td>
<td>0.06380</td>
<td>0.00012</td>
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<tr>
<td>Miscellaneous services sector (dummy)</td>
<td>0.28056</td>
<td>0.08743</td>
<td>0.00145</td>
</tr>
<tr>
<td>(Constant)</td>
<td>1.26916</td>
<td>0.12992</td>
<td>0.00000</td>
</tr>
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</table>

*Note:* Coefficients are unstandardized ordinary least-square regression coefficients. The industrial sector reference group is the restaurant sector.

Number of cases: 373
R square: 0.48
Adjusted R square: 0.447
Standard error of estimate: 0.2644

<table>
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<tr>
<th>No.</th>
<th>Author(s)</th>
<th>Title</th>
<th>Area</th>
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<tr>
<td>473</td>
<td>J. C. van Ours</td>
<td>A pint a day raises a man's pay, but smoking blows that gain away</td>
<td>5</td>
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<td>J. T. Addison L. Bellmann A. Kölling</td>
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